

Amendments to the Claims

Please cancel Claims 1-13. Please add new Claims 14-33. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1-13 (Cancelled)

14. (New) A method for the production of polymeric polysulphides having epoxy terminal-groups in which polymeric polysulphides having thiol terminal-groups are dissolved in an excess of epichlorohydrin, the reaction being started by the addition of alkaline lye with more alkaline lye being added in a second stage whereby the water present in the reaction mixture is distilled azeotropically with epichlorohydrin after which the epichlorohydrin phase obtained in this manner is separated from the deposited salts and the epichlorohydrin is removed from the separated solution by distillation, whereby polymeric polysulphide having epoxy terminal-groups is left behind as a residue.
15. (New) The method of Claim 14, characterized in that the temperature in the first stage is maintained below 70°C by cooling and in the second stage the temperature is maintained between 40 and 90°C by heating.
16. (New) The method of Claim 15, characterized in that the temperature in the first stage is maintained in the range between 20 and 50° C.
17. (New) The method of Claim 14, characterized in that aqueous sodium lye is used as the alkaline lye.
18. (New) The method of Claim 17, wherein the alkaline lye is a 5 to 50% by weight solution of aqueous sodium lye.
19. (New) The method of Claim 14, characterized in that the alkaline lye is used in stoichiometric quantities or in excess.

20. (New) The method of Claim 19, characterized in that the alkaline lye is used in at least double the stoichiometric amount.
21. (New) The method of Claim 14, characterized in that during the first stage catalytic quantities or up to 20% of the total amount are added.
22. (New) The method of Claim 14, characterized in that a 2- to 12-fold excess of epichlorohydrin is used.
23. (New) The method of Claim 22, characterized in that a 3- to 10-fold excess of epichlorohydrin is used.
24. (New) The method of Claim 23, characterized in that a 4- to 8-fold excess of epichlorohydrin is used.
25. (New) The method of Claim 14, characterized in that the reaction is carried out in the presence of a phase transfer catalyst.
26. (New) The method of Claim 25, characterized in that the phase transfer catalyst is a quaternary ammonium salt.
27. (New) The method of Claim 26, characterized in that the quaternary ammonium salt is methyltrioctylammoniumchloride.
28. (New) The method of Claim 14, characterized in that after the azeotropic distillation of the water present in the reaction mixture, the alkali chloride which comes out of solution is filtered off in a closed filter, the alkali chloride then being washed with epichlorohydrin and that finally the epichlorohydrin still adhering to the alkali chloride is dried out by means of a heated inert gas.
29. (New) The method of Claim 14, characterized in that the virtually water-free organic phase is separated by decantation or by lifting out the eliminated salts.

30. (New) The method of Claim 14, characterized in that the obtained polymeric polysulphide is purified by further distillation treatment.
31. (New) The method of Claim 30, characterized in that the polymeric polysulphide having epoxy terminal-groups is purified by carrying out thin-layer distillation.
32. (New) The method of Claim 32, characterized in that the thin-layer distillation is carried out with the addition of an agent which forms an azeotrope with epichlorhydrin.
33. (New) The method of Claim 32, characterized in that the agent is n-propanol or iso-propanol.